



GARLAND INDUSTRIES

Material Safety Data Sheet (MSDS)

Revised 01/11

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CHEMICAL FAMILY: Polyurethane

Product Name: Dura-Walk CWV System- PART A

Product Code: 2503-5

TRANSPORTATION EMERGENCY ASSISTANCE 1-800-762-8225

HMIS HAZARD RATINGS

H:2 F:1 R:0 PP:B

DEGREE OF HAZARD: 4=EXTREME 3=HIGH 2=MODERATE 1=SLIGHT 0=INSIGNIFICANT

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SECTION II - HAZARDOUS SUBSTANCES

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	Approx. % by Wt.	OSHA PEL	ACGIH TLV
Petroleum hydrocarbon (2) CAS# 64742-34-3 and/or (mist) CAS# 64742-11-6	30 +/- 0.5	Not Established	5mg/m3

(2)California Proposition 65 listed chemical - See Section V

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SECTION III - PHYSICAL DATA

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BOILING RANGE: > 200° F

WEIGHT PER GALLON: 11.0 +/- 0.5

VAPOR DENSITY (air=1): Heavier

VAPOR PRESSURE(mm Hg @ 20° C/68° F)
Petroleum hydrocarbon: <1.0

% VOLATILE BY VOLUME: NONE

EVAPORATION RATE (ether=1): Slower

VOC: 0 grams/liter

SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT (TCC) Greater than 200° F

EXTINGUISHING MEDIA: Foam, "alcohol" foam, CO2, dry chemical or water.

SPECIAL FIRE FIGHTING PROCEDURES: Cool containers with water fog to prevent rupture. Firefighters should wear self-contained breathing apparatus.

UNUSUAL FIRE & EXPLOSION HAZARD: Dense smoke may be released during combustion. It is highly unlikely that this product will explode due to mechanical impact.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: Prolonged skin contact may cause irritation. Eye contact may cause irritation, redness and tearing.

WARNING!: This chemical contains petroleum hydrocarbon, a chemical known to the state of California to cause cancer.

EMERGENCY & FIRST AID: If overcome by vapors, remove to fresh air. Give artificial respiration if needed. Eye contact; Flush 15 minutes with water and call a physician. Skin contact; Wash with soap and water, remove contaminated clothing. Ingestion; See a physician immediately.

PRIMARY ROUTES OF ENTRY: Dermal or inhalation most likely.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: Prolonged exposure to very high concentrations may cause skin cancer.

SECTION VI - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Heat, sparks and open flame

INCOMPATIBILITY: Avoid strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion may produce carbon monoxide and/or carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Recover free liquid then add absorbent to spill area. Collect for disposal.

WASTE DISPOSAL METHOD: Dispose in accordance with local, state, and federal regulations. Incinerate in approved facility. Do not incinerate closed containers.

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SECTION VIII - SPECIAL PROTECTION INFORMATION

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RESPIRATORY PROTECTION: Use self-contained or supplied air breathing apparatus whenever Dura-Walk CWH and Dura-Walk CWV is being spray applied in poorly ventilated or confined spaces unless air monitoring can demonstrate that TDI concentrations are below the PEL. (See MSDS for 2502-5 & 2503-5) Use an air-filtering respirator when Dura-Walk CWH and Dura-Walk CWV is being spray applied under any other circumstances. There is not expected to be exposure to TDI above the OSHA PEL when Dura-Walk CWH and Dura-Walk CWV is roller, trowel or squeegee applied.

VENTILATION (Local Exhaust/Mechanical): Mechanical equipment capable of keeping concentration below the PEL.

PROTECTIVE GLOVES: Chemical resistant gloves. Nitrile is recommended.

EYE PROTECTION: Safety goggles

OTHER PROTECTIVE EQUIPMENT: Eye bath & safety shower should be available.

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SECTION IX - SPECIAL PRECAUTIONS & TOXICOLOGICAL PROPERTIES

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SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING & STORING: Avoid prolonged or repeated contact with skin or breathing vapors, mists or fumes. Store in a cool dry place.

TOXICOLOGICAL PROPERTIES: This product contains petroleum oils similar to ones categorized by the International Agency for Research on Cancer (IARC) as causing skin cancer in mice after prolonged and repeated contact. Any potential hazard can be minimized by using recommended protective equipment to avoid skin contact and by washing thoroughly after handling.

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SECTION X – TRANSPORT INFORMATION

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DOT/IMDG/IATA SHIPPING NAME: N.A.

UN/NA NUMBER: N.A.

DOT/IMDG/IATA HAZARD CLASS.: N.A.

T.S.C.A. STATUS: Listed

DOT/IMDG/IATA REQUIRED LABELS: N.A.

TECHNICAL SHIPPING NAME: N.A.

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The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.



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Fax: 011 44 1452 330 657 (outside UK)

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CHEMICAL FAMILY: Isocyanate Prepolymer

Product Name: Dura-Walk CWV System- PART B**Product Code: 2503-5**

TRANSPORTATION EMERGENCY ASSISTANCE 1-800-762-8225

HMIS HAZARD RATINGS

H:2 F:1 R:1 P:I

DEGREE OF HAZARD: 4=EXTREME 3=HIGH 2=MODERATE 1=SLIGHT 0=INSIGNIFICANT

SECTION II - HAZARDOUS SUBSTANCES

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	% by Wt.	OSHA PEL	ACGIH TLV
Toluene diisocyanate monomer(1)(2); (TDI) CAS# 26471-62-5	< 0.5	.02ppm	.005ppm

(1)This chemical is subject to SARA Title III Section 313 reporting

(2)California Proposition 65 listed chemical - See Section V

SECTION III - PHYSICAL DATA

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BOILING RANGE: Greater than 200° F**WEIGHT PER GALLON:** 8.4 Lbs**VAPOR DENSITY (air=1):** Heavier**VAPOR PRESSURE (mm Hg @ 20° C):**
Toluene diisocyanate: <0.01**%VOLATILE BY VOLUME:** 0**EVAPORATION RATE (ether=1):** Slower**VOC:** 0 grams/liter

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SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT (TCC) Greater than 200° F

EXTINGUISHING MEDIA: Foam, "alcohol" foam, CO₂, dry chemical or water.

SPECIAL FIRE FIGHTING PROCEDURES: Cool containers with water fog to prevent rupture. Firefighters should wear self-contained breathing apparatus and full protective clothing. Do not spray pool fires directly; a solid stream of water directed into hot burning liquid can cause frothing.

UNUSUAL FIRE & EXPLOSION HAZARD: Material reacts with water to produce carbon dioxide gas which could cause pressure buildup in confined spaces. It is unlikely that this product will explode due to mechanical impact.

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SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: Repeated exposure can cause allergic reaction with development of occupational asthma. Long term repeated exposure to vapor may cause chronically progressive pulmonary disease. Repeated skin contact can result in sensitization.

WARNING!: This product may contain trace amounts of toluene diisocyanate monomer, a chemical known to the state of California to cause cancer.

EMERGENCY & FIRST AID: If overcome by vapors, remove to fresh air. Give artificial respiration if needed. Eye contact; Flush 15 minutes with water and call a physician. Skin contact; Wash with soap and water, remove contaminated clothing. Ingestion; See a physician immediately.

PRIMARY ROUTES OF ENTRY: Dermal or inhalation most likely.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: Swallowing causes irritation, nausea, vomiting and abdominal pain. Inhalation can cause headache, choking cough, difficulty in breathing and chest pain. Skin or eye contact can cause severe irritation and redness.

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SECTION VI - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Avoid contamination with water, sodium hydroxide, amines, alkaline materials and organometallic compounds.

INCOMPATIBILITY: May react with water, alcohols, amines, ammonia and carboxylic acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete burning may produce nitrogen oxides, hydrogen cyanide, carbon monoxide and/or carbon dioxide.

HAZARDOUS POLYMERIZATION: Reacts slowly with water to produce carbon dioxide gas.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear self-contained breathing apparatus. Cover spills with sawdust, vermiculite, or other absorbent material to minimize spreading of the material before collection. must be neutralized with a 6% ammonia solution on water. Allow to react in an open, unsealed container as carbon dioxide gas will be released during neutralization.

WASTE DISPOSAL METHOD: Dispose in accordance with local, state, and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use self-contained or supplied air breathing apparatus whenever 2503 is being spray applied in poorly ventilated or confined spaces unless air monitoring can demonstrate that TDI concentrations are below the PEL. Use an air-filtering respirator when 2503 is being spray applied under any other circumstances. There is not expected to be exposure to TDI above the OSHA PEL when 2503 is roller, trowel or squeegee applied.

VENTILATION (Local Exhaust/Mechanical): Mechanical equipment capable of keeping concentration below PEL.

PROTECTIVE GLOVES: Chemical resistant gloves. Nitrile is recommended.

EYE PROTECTION: Safety goggles

OTHER PROTECTIVE EQUIPMENT: Eye bath & safety shower should be available.

SECTION IX - SPECIAL PRECAUTIONS & TOXICOLOGICAL PROPERTIES

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING & STORING: Use with adequate ventilation. Avoid contact with eyes, skin or clothing. Do not breathe vapors or mists. Keep containers closed and store in a cool dry place.

TOXICOLOGICAL PROPERTIES: When toluene diisocyanate monomer was introduced into a rat's stomach the National Toxicological Program reported that there was an increase in tumors over non-exposed rats. Inhalation studies conducted by Hazelton Labs did not show TDI to be carcinogenic to rats and mice.

DANGER! POISON!

Harmful or fatal if swallowed. Vapor harmful. May cause skin or eye irritation.

SECTION X - TRANSPORT INFORMATION

Plastic Liquid Resin Material

DOT Shipping: Class 60

Non-Hazardous

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SECTION XI – REGULATORY INFORMATION

Toluene Diisocyanate CAS# 26471-62-5 contains 2,4 Toluene Diisocyanate CAS# 584-84-9 and 2,6 Toluene Diisocyanate CAS# 91-08-7.

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372:

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
2, 4 Toluene Diisocyanate	584-84-9	<3%
2, 6 Toluene Diisocyanate	91-08-7	<1%

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard

A delayed health hazard

A reactive hazard

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